Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAYKC1621

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * *	* *	* *	* *	* Welcome to STN International * * * * * * * * * *
NEWS	1			Web Page for STN Seminar Schedule - N. America
NEWS	2	MAR	31	IFICDB, IFIPAT, and IFIUDB enhanced with new custom
				IPC display formats
NEWS	3	MAR	31	CAS REGISTRY enhanced with additional experimental
				spectra
NEWS	4	MAR	31	CA/CAplus and CASREACT patent number format for U.S.
				applications updated
NEWS	5			LPCI now available as a replacement to LDPCI
NEWS				EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	7	APR	04	STN AnaVist, Version 1, to be discontinued
NEWS	8	APR	15	WPIDS, WPINDEX, and WPIX enhanced with new
				predefined hit display formats
NEWS				EMBASE Controlled Term thesaurus enhanced
NEWS				IMSRESEARCH reloaded with enhancements
NEWS	11	MAY	30	INPAFAMDB now available on STN for patent family
				searching
NEWS	12	MAY	30	DGENE, PCTGEN, and USGENE enhanced with new homology
				sequence search option
NEWS				EPFULL enhanced with 260,000 English abstracts
NEWS				KOREAPAT updated with 41,000 documents
NEWS	15	JUN	13	USPATFULL and USPAT2 updated with 11-character
				patent numbers for U.S. applications
NEWS	16	JUN	19	CAS REGISTRY includes selected substances from
				web-based collections
NEWS	1 /	JUN	25	CA/CAplus and USPAT databases updated with IPC
NEWS	1.0	JUN	2.0	reclassification data
NEWS	18	JUN	30	AEROSPACE enhanced with more than 1 million U.S.
NEWS	10	JUN	20	patent records EMBASE, EMBAL, and LEMBASE updated with additional
NEWS	19	JUN	30	options to display authors and affiliated
				organizations
NEWS	20	JUN	20	STN on the Web enhanced with new STN AnaVist
MEMO	20	OUN	30	Assistant and BLAST plug-in
NEWS	21	JUN	20	STN AnaVist enhanced with database content from EPFULL
NEWS		JUL		CA/CAplus patent coverage enhanced
NEWS		JUL		EPFULL enhanced with additional legal status
MEMO	23	OOL	20	information from the epoline Register
NEWS	24	JUL	28	IFICDB, IFIPAT, and IFIUDB reloaded with enhancements
NEWS				STN Viewer performance improved
NEWS		AUG		INPADOCDB and INPAFAMDB coverage enhanced
NEWS		AUG		CA/CAplus enhanced with printed Chemical Abstracts
TATING	/	1100	-3	on out to printed chemical aboutacts

page images from 1967-1998

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability

NEWS LOGIN Welcome Banner and News Items

NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 12:21:48 ON 13 AUG 2008

=> file caplus

 COST IN U.S. DOLLARS
 SINCE FILE
 TOTAL

 FULL ESTIMATED COST
 0.21
 0.21

FILE 'CAPLUS' ENTERED AT 12:22:09 ON 13 AUG 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publisher listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 13 Aug 2008 VOL 149 ISS 7 FILE LAST UPDATED: 12 Aug 2008 (20080812/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/legal/infopolicy.html

=> s (base (3w) catalyst) (L) (absorbent (3w) support) 767472 BASE 168892 BASES

```
869209 BASE
                (BASE OR BASES)
       811009 CATALYST
       807940 CATALYSTS
       1038657 CATALYST
                 (CATALYST OR CATALYSTS)
        46537 ABSORBENT
        23809 ABSORBENTS
        56074 ABSORBENT
                 (ABSORBENT OR ABSORBENTS)
        533749 SUPPORT
        149657 SUPPORTS
        634598 SUPPORT
                 (SUPPORT OR SUPPORTS)
             0 (BASE (3W) CATALYST) (L) (ABSORBENT (3W) SUPPORT)
=> s (base (7w) absorbent (3w) support)
        767472 BASE
        168892 BASES
        869209 BASE
                 (BASE OR BASES)
         46537 ABSORBENT
         23809 ABSORBENTS
         56074 ABSORBENT
                 (ABSORBENT OR ABSORBENTS)
        533749 SUPPORT
        149657 SUPPORTS
        634598 SUPPORT
                 (SUPPORT OR SUPPORTS)
L2
             0 (BASE (7W) ABSORBENT (3W) SUPPORT)
=> s base (4w) alumina (4w) support
        767472 BASE
        168892 BASES
        869209 BASE
                 (BASE OR BASES)
        325637 ALUMINA
          2645 ALUMINAS
        325917 ALUMINA
                 (ALUMINA OR ALUMINAS)
        533749 SUPPORT
        149657 SUPPORTS
        634598 SUPPORT
                 (SUPPORT OR SUPPORTS)
1.3
            12 BASE (4W) ALUMINA (4W) SUPPORT
=> d 13 1 ibib abs
L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
                         2007:701438 CAPLUS
DOCUMENT NUMBER:
                         147:95526
TITLE:
                         Catalyst for epoxidation of an alkene to an alkene
                         oxide, method of making catalyst and method of using
                         it.
INVENTOR(S):
                         Zhang, Xiankuan; Khanmamedova, Alla Konstantin
PATENT ASSIGNEE(S):
                        Saudi Basic Industries Corporation, USA
SOURCE:
                         U.S. Pat. Appl. Publ., 8pp.
```

CODEN: USXXCO Patent

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. US 20070149792 A1 20070628 US 2005-316031 20051222 PRIORITY APPLN. INFO.: US 2005-316031 CASREACT 147:95526

OTHER SOURCE(S):

The present invention if for a catalyst for epoxidn. of an alkene (e.g. ethylene), to an alkene oxide (e.g. ethylene oxide), on which silver has been deposited on alumina as a support which has been modified with certain weak base compds., such as oxides of a Group 1A, Group 2A, Group 3A or the first transition series of the Periodic Table of Elements, and with a high temperature heat treatment. Optional promoters selected from the group consisting of compds. of Group 1A, Group 2A, Group 7A and Group 8 may be contacted with the alpha-alumina support in solution with a silver compound, with the catalyst precursor before calcination or with the catalyst after calcination. The catalyst is brought into contact with alkene and oxygen under reaction conditions to selectively convert the alkene to an alkene oxide. Thus, 28.4 g support rings (Norpro SA 5552) was impregnated with 7.7 mL aqueous solution of 1.24 weight & Ca(NO3)2 and

rotary

evaporated under vacuum till no residual solution was visible. The impregnated support was then dried and calcined in a muffle furnace in air at 120° for 10 min and 900° for 5 h and naturally cooled to

ambient temperature to give a support containing 1000 ppm CaO. An aqueous

solution of 0.17

weight% CsCl (4 mL) and 1 mL deionized water were placed inside a tinted beaker in an ice bath, followed by gradually adding 2.7 mL ethylenediamine with stirring and then introducing 5.7 g silver oxalate in small portions while keeping the temperature at 20° to give a silver-amine solution The silver-amine solution was poured were poured onto 25.9 g modified support rings and shaken. The impregnated rings were rotary evaporated under vacuum for 5-7 min, placed into a calcination dish, calcined in a muffle furnace in air at 260° for 10 min and then 250° for 10 min, cooled to ambient temperature to give a catalyst containing 13.5% Ag and 180 ppm Cs.

The

catalyst in ring shape was crushed and sieved to 40 mesh and ready for testing. The catalyst (2 mL) was charged into a 1/4" stainless steel U-tube, heated in a sand bath at 220°. A mixture of ethylene 25, O 10, CO2 10%, and 1 ppm CH2Cl2, and balance CH4 was fed into the U tube at GHSV of 5,000 h-1 and 300 psig to give ethylene oxide with 82.4% selectivity and 10.1% ethylene conversion after .apprx.24 h.

=> s base (5w) silica (3w) support 767472 BASE 168892 BASES 869209 BASE (BASE OR BASES) 582524 SILICA 4397 STLICAS

583005 SILICA

(SILICA OR SILICAS)

```
533749 SUPPORT
        149657 SUPPORTS
       634598 SUPPORT
                 (SUPPORT OR SUPPORTS)
             9 BASE (5W) SILICA (3W) SUPPORT
L4
=> d 14 1 ibib abs
L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
                        2006:58750 CAPLUS
DOCUMENT NUMBER:
                        144:313964
TITLE:
                        Efficient allylic oxidation of cyclohexene catalyzed
                        by immobilized Schiff base complex using peroxides as
                        oxidants
                        Mukherjee, Sanghamitra; Samanta, Sujit; Roy, Bidhan
AUTHOR(S):
                        Chandra; Bhaumik, Asim
                        Department of Chemistry, Jadavpur University, Kolkata,
CORPORATE SOURCE:
                        700 032, India
SOURCE:
                        Applied Catalysis, A: General (2006), 301(1), 79-88
                        CODEN: ACAGE4; ISSN: 0926-860X
                        Elsevier B.V.
PUBLISHER:
DOCUMENT TYPE:
                        Journal
LANGUAGE:
                        English
     Allylic oxidation of cyclohexene was carried out over a Cu
     N-(2-Hydroxyphenyl)salicylaldimine Schiff base copper complex and its
     immobilized analog supported on silica modified with 3-
     aminopropyltrimethoxysilane. The immobilized complex was characterized by
     using atomic absorption spectrophotometry (AAS), FT-IR, EPR and UV-vis
    spectroscopic studies and SEM image anal. The catalytic oxidation of
     cyclohexene was carried out over this copper complex and the immobilized
     analog with different oxidants, e.g., dilute aqueous hydrogen peroxide and
     tert-Bu hydroperoxide at ambient conditions. Acetonitrile and water were
     used as solvent and dispersion medium, resp., with or without addnl. acid
     in different sets of oxidation reactions. The major product is
     2-cyclohexen-1-one with small amts. of cyclohexene oxide,
     2-cyclohexen-1-ol, and 1,2-cyclohexane-diol. The activity of the
    immobilized catalyst remains nearly the same after two cycles, suggesting
     the true heterogeneous nature of the catalyst.
                               THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                        29
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
=> d his
     (FILE 'HOME' ENTERED AT 12:21:48 ON 13 AUG 2008)
     FILE 'CAPLUS' ENTERED AT 12:22:09 ON 13 AUG 2008
             0 S (BASE (3W) CATALYST) (L) (ABSORBENT (3W) SUPPORT)
             0 S (BASE (7W) ABSORBENT (3W) SUPPORT)
L2
L3
             12 S BASE (4W) ALUMINA (4W) SUPPORT
             9 S BASE (5W) SILICA (3W) SUPPORT
L4
=> s 13 and 14 and (fatty (2w) acid (2w) alkyl (2w) ester)
        407244 FATTY
            14 FATTIES
        407248 FATTY
                 (FATTY OR FATTIES)
```

```
4654151 ACTD
       1646510 ACTDS
       5170122 ACID
                 (ACID OR ACIDS)
       615780 ALKYL
          6722 ALKYLS
        618823 ALKYL
                 (ALKYL OR ALKYLS)
       626731 ESTER
       460209 ESTERS
       869626 ESTER
                 (ESTER OR ESTERS)
          1143 FATTY (2W) ACID (2W) ALKYL (2W) ESTER
             0 L3 AND L4 AND (FATTY (2W) ACID (2W) ALKYL (2W) ESTER)
=> s 13 and ester
       626731 ESTER
        460209 ESTERS
       869626 ESTER
                 (ESTER OR ESTERS)
             1 L3 AND ESTER
=> d 16 ibib abs
```

1.6

SOURCE:

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:220767 CAPLUS

DOCUMENT NUMBER: 120:220767

ORIGINAL REFERENCE NO.: 120:39177a,39180a

TITLE: Study of the hydrodeoxygenation of carbonyl,

carboxylic and guaiacyl groups over sulfided

CoMo/y-A1203 and NiMo/y-A1203 catalyst.

II. influence of water, ammonia and hydrogen sulfide

Laurent, Etienne; Delmon, Bernard

AUTHOR(S): CORPORATE SOURCE: Unite de Catalyse et Chimie des Materiaux Divises,

Universite Catholique de Louvain, Place Croix du Sud 2

Boite 17, Louvain-la-Neuve, B-1348, Belg.

Applied Catalysis, A: General (1994), 109(1), 97-115

CODEN: ACAGE4; ISSN: 0926-860X

DOCUMENT TYPE: Journal

LANGUAGE:

English The hydrotreatment of various oxygenated groups (ketonic, carboxylic, methoxyphenol) present in bio-oils in the presence of CoMo and NiMo catalysts was studied in a batch reactor using a mixture of model compds. (4-methylacetophenone, di-Et sebacate, and quaiacol) mimicking the real feed. The influence of potential poisons or inhibitors of the reactions (H2O, NH3, and H2S) was determined High quantities of water had only a very slight inhibiting effect on the reactions. Ammonia strongly inhibited the conversion of carboxylic esters and the removal of the methoxy group of quaiacol, but, surprisingly, the hydrogenation of the ketonic group was not affected. Hydrogen sulfide depressed the activity of the NiMo catalyst for the conversion of the ketonic group but not that of the CoMo catalyst. It had an enhancing effect on the conversion of the carboxylic ester group and no effect on the removal of the methoxy group of guaiacol. The absence of the influence of ammonia on the hydrogenation of the ketonic group was interpreted as resulting from the participation of nucleophilic sites and hydridic species in the reaction mechanism. Carboxylic esters seemed to react on electrophilic

sites. Broensted acids were thought to be responsible for decarboxylation, while uncoordinated metal atoms and sulfhydryl groups could be responsible for the hydrogenation of carboxylic groups. On the other hand, the surface of the alumina support catalyzed the hydrolysis of carboxylic esters into acids. The demethylation of quaiacol occurred for a large part on the Lewis acid-base sites of the y- alumina support. The use of hydrogen sulfide and ammonia showed a high potential for controlling the selectivity of reactions occurring in bio-oils hydrotreatment. The present results gave hope that the deoxygenation of carboxylic groups could be selectively performed through decarboxylation thanks to catalyst selection and control of the hydrogen sulfide pressure. Ketonic groups and aldehydic groups could be selectively eliminated from complex feeds by applying a pressure of ammonia which would inhibit all reactions but hydrogenation.

=> d his

(FILE 'HOME' ENTERED AT 12:21:48 ON 13 AUG 2008)

FILE 'CAPLUS' ENTERED AT 12:22:09 ON 13 AUG 2008

L1 0 S (BASE (3W) CATALYST) (L) (ABSORBENT (3W) SUPPORT)

0 S (BASE (7W) ABSORBENT (3W) SUPPORT) L2

L3 12 S BASE (4W) ALUMINA (4W) SUPPORT T.4 9 S BASE (5W) SILICA (3W) SUPPORT

L5 0 S L3 AND L4 AND (FATTY (2W) ACID (2W) ALKYL (2W) ESTER)

L6 1 S L3 AND ESTER

=> s 14 and ester

626731 ESTER 460209 ESTERS

869626 ESTER

(ESTER OR ESTERS)

1 L4 AND ESTER

=> d 17 ibib abs

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

2003:656660 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 139:193964

Enantioselective cation-exchange materials

INVENTOR(S): Lindner, Wolfgang; Laemmerhofer, Michael PATENT ASSIGNEE(S): Austria

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 20030821 WO 2003-AT46 WO 2003068397 A1 W: AE, AG, AL, AM, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,

HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,

```
PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG,
             US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    AT 2002000240 A 20030415
                                            AT 2002-240
                                                                      20020215
    AT 411227
                                20031125
                         В
    AU 2003208160
                         A1 20030904 AU 2003-208160
                                                                     20030214
    EP 1474234
                         A1 20041110 EP 2003-706112
B1 20050720
                                                                     20030214
    EP 1474234
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP 2005517196
                      Т
                               20050609
                                            JP 2003-567573
     JP 4044048
                         B2
                                20080206
    AT 299755 T 20050815 AT 2003-706112 US 20050131087 A1 20050616 US 2004-503689 US 7064234 B2 20060620
                                                                     20030214
                                                                      20040804
PRIORITY APPLN. INFO.:
                                             AT 2002-240
                                                                 A 20020215
                                             EP 2003-706112 A 20030214
WO 2003-AT46 W 20030214
    The invention relates to a enantioselective cation-exchange material
     comprising a chiral selector (1) consisting of a chiral component (2) and
    at least one cation-exchange group (X), a spacer (3), and a carrier (4). The cation-exchange material is characterized by the fact that the chiral
    component (2) has a mol. weight of <1,000 while the at least one
     cation-exchange group (X) is an acid group having a pKa < 4.0. A typical
     chiral cation exchange material was manufactured by stirring N-Boc-(S)-tyrosine
     3 h in 2 mL each CH2C12 and trifluoroacetic acid 3 h, reacting the
     resulting (S)-0-allyltyrosine 15 h with 3,5-dichlorobenzoic acid
    N-hydroxysuccinimide ester, and immobilizing the product on
    silica.
REFERENCE COUNT:
                         5
                               THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
=> s immobilizing (L) (base (2w) catalyst) (L) silica
          8652 IMMOBILIZING
        767472 BASE
        168892 BASES
        869209 BASE
                 (BASE OR BASES)
       811009 CATALYST
        807940 CATALYSTS
       1038657 CATALYST
                  (CATALYST OR CATALYSTS)
        582524 SILICA
         4397 SILICAS
        583005 SILICA
                  (SILICA OR SILICAS)
             0 IMMOBILIZING (L) (BASE (2W) CATALYST) (L) SILICA
L8
=> s IMMOBILIZING (s) (BASE (2W) CATALYST) (s) SILICA
          8652 IMMOBILIZING
        767472 BASE
        168892 BASES
        869209 BASE
```

L9

```
(BASE OR BASES)
       811009 CATALYST
       807940 CATALYSTS
       1038657 CATALYST
                 (CATALYST OR CATALYSTS)
       582524 SILICA
          4397 SILICAS
        583005 SILICA
                 (SILICA OR SILICAS)
             0 IMMOBILIZING (S) (BASE (2W) CATALYST) (S) SILICA
=> s IMMOBILIZING (s) BASE (s) SILICA
         8652 IMMOBILIZING
        767472 BASE
        168892 BASES
       869209 BASE
                 (BASE OR BASES)
        582524 SILICA
          4397 SILICAS
        583005 SILICA
                 (SILICA OR SILICAS)
             2 IMMOBILIZING (S) BASE (S) SILICA
=> d 110 1-2 ibib abs
L10 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
                         2008:553828 CAPLUS
TITLE:
                         Preparation and characterization of porphyrin
                         chromophores immobilized on micro-silica gel beads
AUTHOR (S):
                         Matsumoto, Jin; Matsumoto, Tomoko; Senda, Yoshiya;
                         Shiragami, Tsutomu; Yasuda, Masahide
CORPORATE SOURCE:
                         Department of Applied Chemistry, Faculty of
                         Engineering, University of Miyazaki, Gakuen-Kibanadai,
                         Miyazaki, 889-2192, Japan
SOURCE:
                         Journal of Photochemistry and Photobiology, A:
                         Chemistry (2008), 197(1), 101-109
                         CODEN: JPPCEJ; ISSN: 1010-6030
PUBLISHER:
                         Elsevier B.V.
DOCUMENT TYPE:
                        Journal
LANGUAGE:
                         English
    Micro-silica gel beads (la-c) immobilizing
     dihydroxoantimony(V) tetraphenylporphyrin (SbTpp), free base
     tetraphenylporphyrin (H2Tpp), and zinc(II) tetraphenylporphyrin (ZnTpp)
     chromophores were prepared by the reactions of 3-aminopropyl silica
     gel (SiO2-NH2) with the dihydroxoantimony(V) complex (2a), the free
     base (2b), and the zinc complex (2c) of 5-[4-
     (succinimidyloxycarbonyl)phenyl]-10,15,20-triphenylporphyrin, resp.
     Absorption spectrophotometry was performed on la-c using a confocal laser
    scanning microscope (CLSM) and determined that the yields for the
     immobilization of SbTpp, H2Tpp, and ZnTpp on SiO2-NH2 were 31.7, 95.9, and
     45.1%, resp. Moreover, 1a was converted into its acetyl analog (1a') by
     the acetylation of the axial hydroxo ligands and aminopropyl of la with
     Ac20, since the interactions of the SbTpp chromophore with the residual
     amino group on SiO2 was observed by spectroscopic anal. using CLSM. In
     micro-channel reactors (MCR), the photoreaction of la' with Et2NH induced
    demetallation to produce 1b immobilizing H2Tpp chromophore. Moreover, the
    reaction of 1b with Zn(OAc)2 produced 1c immobilizing ZnTpp chromophore.
```

Thus, micro-silica gel beads (la) were transformed into 1c in a micro-region of a silica gel surface by way of photochem, reaction with

Et2NH and subsequent metalation with Zn(OAc)2.

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1129614 CAPLUS

DOCUMENT NUMBER: 143:402187

TITLE:

Temperature-responsive surface, and its application method

INVENTOR(S): Suga, Hiroshi; Sakai, Hideaki; Kakimoto, Masaaki PATENT ASSIGNEE(S):

Cellseed Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005292104	A	20051020	JP 2004-134820	20040331
PRIORITY APPLN. INFO.:			JP 2004-134820	20040331
AR A base material sur	face	capable of re	sponsing to a temperatu	re change

provided, which is applicable to isolating a biosubstance (e.g., hormone, peptide, protein). The base material surface is prepared by immobilizing a dendritic polymer with a siloxane frame or its derivative having a grafted another polymer on a base material surface in a thin layer.

=> d his

(FILE 'HOME' ENTERED AT 12:21:48 ON 13 AUG 2008)

```
FILE 'CAPLUS' ENTERED AT 12:22:09 ON 13 AUG 2008
```

0 S (BASE (3W) CATALYST) (L) (ABSORBENT (3W) SUPPORT)

L2 0 S (BASE (7W) ABSORBENT (3W) SUPPORT)

L3 12 S BASE (4W) ALUMINA (4W) SUPPORT L4 9 S BASE (5W) SILICA (3W) SUPPORT

0 S L3 AND L4 AND (FATTY (2W) ACID (2W) ALKYL (2W) ESTER)

L6 1 S L3 AND ESTER

L7 1 S L4 AND ESTER 1.8 0 S IMMOBILIZING (L) (BASE (2W) CATALYST) (L) SILICA 1.9 O S IMMOBILIZING (S) (BASE (2W) CATALYST) (S) SILICA

L10 2 S IMMOBILIZING (S) BASE (S) SILICA

=> s immobilized (s) alkali (s) silica

110429 IMMOBILIZED 430603 ALKALI

11586 ALKALIS 32438 ALKALIES

456570 ALKALI

(ALKALI OR ALKALIS OR ALKALIES)

582524 STLTCA 4397 STLTCAS

583005 STLTCA

```
(SILICA OR SILICAS)
            17 IMMOBILIZED (S) ALKALI (S) SILICA
=> s 111 and ester
        626731 ESTER
        460209 ESTERS
        869626 ESTER
                (ESTER OR ESTERS)
L12
             1 L11 AND ESTER
=> d 112 ibib abs
L12 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
                        1993:72616 CAPLUS
DOCUMENT NUMBER .
                        118.72616
ORIGINAL REFERENCE NO.: 118:12527a,12530a
TITLE:
                        Enhanced chromatographic selectivity for sodium(1+)
                         ions on a calixarene-bonded silica phase
AUTHOR(S):
                         Glennon, Jeremy D.; O'Connor, Kieran; Srijaranai,
                        Supalax; Manley, Kevin; Harris, Stephen J.; McKervey,
                        M. Anthony
CORPORATE SOURCE:
                        Univ. Coll. Cork, Ire.
SOURCE:
                        Analytical Letters (1993), 26(1), 153-62
                        CODEN: ANALBP; ISSN: 0003-2719
DOCUMENT TYPE:
                        Journal
LANGUAGE:
                        English
OTHER SOURCE(S):
                        CASREACT 118:72616
AB Functional esters of calixarenes, which are phenolic
     metacyclophanes annulated by a single methylene bridge, are
     immobilized onto silica particles for use in the separation
     of alkali metal ions by high performance liquid chromatog. with
     conductivity detection. The immobilization of tetrameric and hexameric
     calixarene Et esters was carried out using the triethoxy silane
     derivs. of p-allylcalix[n]arene Et esters. At an injected
     concentration of 10-2M, optimum selectivity for Na ions was achieved using a
     mobile phase of 30% MeOH/H2O with the calix[4]arene ester
     stationary phase. A mixture of four alkali metal chlorides is shown on
     injection to give a clear separation of Na+ from the other unresolved ions, the
     retention order being Na+ » K+ > Cs+ > Li+ = t0.
=> s basic (2w) alumina
        429273 BASIC
          3745 BASTCS
        432603 BASTC
                 (BASIC OR BASICS)
        325637 ALUMINA
          2645 ALUMINAS
        325917 ALUMINA
                 (ALUMINA OR ALUMINAS)
L13
           712 BASIC (2W) ALUMINA
=> s 113 and ester
        626731 ESTER
        460209 ESTERS
        869626 ESTER
                 (ESTER OR ESTERS)
```

1.14 68 L13 AND ESTER

=> s 114 and (fat! or oil!) 185578 FAT! 433078 OIL!

L15 3 L14 AND (FAT! OR OIL!)

=> d 115 1-3 ibib abs

L15 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:730870 CAPLUS

DOCUMENT NUMBER: 147:145219

TITLE: INVENTOR(S):

Method of preparing compositions enriched in compounds containing carbon chains of varying degrees of

unsaturation using argentation chromatography Binder, Thomas P.; Geier, Doug; Hilaly, Ahmad;

Sandage, Robert Duane; Soper, John G. PATENT ASSIGNEE(S): Archer-Daniels-Midland Company, USA

SOURCE: PCT Int. Appl., 49pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIND DATE		APPLICATION NO.						DATE					
540	WO 2007075499					A2 20070705			WO 2006 HG40000					20061218				
								WO 2006-US48098						20001218				
WO	WO 2007075499								-	BA, BB, BG, BR, BW, BY, BZ,						C3 C11		
	W:																	
							DE,											
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	
		KP,	KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,	TR,	TT,	
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW							
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,	
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
		KG,	KZ,	MD,	RU,	TJ,	TM,	AP,	EA,	EP,	OA							
US 20070181504					A1		20070809 US 2006-612250					20061218						
IORITY APPLN. INFO.:							US 2005-750794P P 200512					216						
The method utilines as argentized estimate regions or a conditioned																		

The method utilizes an argentized cationic resin or a conditioned argentized alumina to sep. compds. containing saturated or mono-unsatd. carbon chains from compds, having polyunsatd, carbon chains present in a starting composition The invention is particularly useful for preparing a composition enriched

in polyunsatd. fatty acid alkyl esters from mixts. of fatty acid esters in a starting composition derived from vegetable oils. The invention is also directed to a method of preparing a conditioned argentized alumina adsorbent having increased selectivity for compds.

L15 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:733055 CAPLUS

containing one or more polyunsatd. carbon chains.

DOCUMENT NUMBER: 145:170659

TITLE: Manufacture of fatty acid alkyl esters, and

fuels containing them

INVENTOR(S): Hayafuji, Shigeto

PATENT ASSIGNEE(S): CDM Consulting Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. 20050117 PRIORITY APPLN. INFO.: 20050117

AB Fatty acid alkyl esters, useful for biodiesel fuels, are manufactured by esterification of free fatty acid-containing oils with alcs. and treatment of the reaction products with basic adsorbents to remove unreacted free fatty acids for purification of the products. Thus, palmitic acid and MeOH were mixed at a molar ratio of 20:1 and esterified at 290° and 20 MPa for 15 min to give a reaction mixture, which was passed through a column packed with basic alumina for adsorptive removal of unreacted palmitic acid, treated with a column packed with activated clay, centrifuged, and decompressed to give Me palmitate of 99.7% purity and acid value 0.05 in 97.8% yield.

L15 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1962:66634 CAPLUS

DOCUMENT NUMBER: 56:66634

ORIGINAL REFERENCE NO.: 56:12759g-i,12760a-i,12761a-b

TITLE: Synthetical and stereochemical studies in the perhydrobenzocyclohepten-1-one system

AUTHOR(S): Kimchi, Dvora; Bien, Shlomo
CORPORATE SOURCE: Israel Inst. Techno., Haifa, Israel
Journal of the Chemical Society (1961) 5345-53

CODEN: JCSOA9; ISSN: 0368-1769

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 56:66634

AB Preparation of 2,3,4,5,6,7,8,9-octahydrobenzocyclohepten-1-one (I) was described, and the stereochem, of its ketonic and alc, reduction products was determined Na (4.2 q.) in 53 ml. alc. was treated 5 min. with 20 q. Me 2-oxocyclo-heptanecarboxylate (II), then refluxed 8 hrs. with 35 q. Me γ-bromobutyrate, poured into H2O, extracted with Et2O, and the product distilled at 120-30°/0.01 mm. The distillate (15 g.) refluxed 20 hrs. in 260 ml. H2O and 125 ml. MeOH containing 40 g. Ba(OH)2, and the product distilled gave 9.9 g. crude γ-(2-oxocycloheptyl)butyric acid (III), distilled gave 9.7 g. Grude /-[x-oxocyclonepyr] and (---,) b0.01 138-40°; semicarbazone m. 177-9° (MbGH). III semicarbazone (33 g.) refluxed 1 hr. with 35 g. (COZH)2 in 140 ml. H2O and the product distilled gave 25 g. III, b0.01 140-1°, n200 1.4810; S-benzylthiouronium salt m. 155-6° (aqueous alc.). To a suspension of 9 g K in 150 ml. C6H6 40 g. II was added in 0.5 hr., the solution treated with 0.8 g. NaI in 4 ml. alc., followed by 42.5g. Me γ -bromobutyrate in 70 ml. C6H6, mixture refluxed 38 hrs., poured on ice and salt, extracted

with Et2O, and distilled at 120-30°/0.01 mm. to give 40 g. oil. Crystallization afforded 16.5 g. suberic acid and 22 g. III. III (31.5g.) in MeOH left

overnight with 10 g. NaBH4 gave a quant. vield y-(2hydroxycycloheptyl)butyric acid (IV); S-benzylthiuronium salt m.

q.

```
146-7° (H2O); 3,5-dinitrobenzoate m. 88-9° (alc.). Crude IV
     (30 g.) treated 2 hrs. at room temperature with CH2N2 gave 26 g. Me
     γ-(2-hydroxycycloheptyl)butyrate (V), b0.01 108-10°, n20D
     1.4815, pos. test with C(NO2)4. V (2 g.) in C6H6 shaken overnight with 2
     q. P205 gave 1 q. Me γ(cvclohept-1-env1)butvrate (VI), b0.01
     67-70°, n18D 1.4700, V (8 g.) in 15 ml. C5H5N treated at 0°
     with 6 g. POCl3, left overnight at room temperature, and heated 1 hr. gave 6.5
     q. VI. V (8 q.) in 15 ml. C5H5N treated overnight at room temperature with 8
     p-MeC6H4SO2Cl gave 6 g. VI. VI (6.5 g.) refluxed 4 hrs. with excess 15%
     aqueous KOH, acidified with dilute HCl, and extracted with Et20 gave
     γ-(2-cyclohept-1-enyl)butyrate (VII), b0.01 120-2°, n18D
     1.4867; S-benzylthiuronium salt m. 148-9° (aqueous alc.). VII (90 g.)
     added dropwise to 1030 ml. Ac20, 64 ml. Ac0H, and 1.28 g. ZnC12, refluxed
     2 hrs., concentrated, diluted, extracted with Et2O, and evaporated gave 88 g.
crude oil as
     a mixture of the unsatd, ketone and a lactone. This oil refluxed 2 hrs.
     with an excess 10% NaOH and working up of the 48 g. crude oil showed only
     infrared absorption of the unsatd. carbonvl group. The alkaline solution upon
     acidification afforded 34 g. VII. The crude ketone (48 g.)
     chromatographed on basic Al203 and the oil distilled at 80-2°/0.01 mm.
     gave a ketone finally purified by preparing the semicarbazone, and cleavage
     with (CO2H)2 gave I, b0.01 80°, n25D 1.5265; 2,4-
     dinitrophenylhydrazone m. 261-2°; semicarbazone m. 206-7°;
     oxime m. 148-9° (aqueous MeOH). I (1 g.) in 40 ml. tetrahydrofuran
     refluxed 2 hrs. with 1.6 g. lithium hydridotri-tert-butoxyaluminate under
    N, decomposed, extracted with Et2O, and the 0.85 g. oily residue
     chromatographed on Al203 gave 0.12 g. mixture of cycloalkenes and 0.38 g.
     2,3,4,5,6,7,8,9-octahydrobenzocyclohepten-1-ol (VIII), m. 55-6°,
     b0.01 100°. VIII was obtained on reduction with LiAlH4. VIII (1 g.)
     afforded 1.1 g. acetate (IX), b0.2 68-70°, n20D 1.4970. IX (0.8
     g.) in 2% NaOMe solution kept overnight at room temperature gave 0.63 g.
allylic
     alc. The alc. (0.6 g.) shaken over night with 4 g. activated MnO2 in 10
     ml. CC14 and the product chromatographed gave I. I (2 g.) hydrogenated in
     alc. at room temperature 3 hrs. over 0.1 g. 10% Pd-C gave 1.95 g. mixture A of
     cis-(X) and trans-ketone(XI), b0.01 52-3°, containing 83% X. I (0.25
     g.), 10 ml. alc., 0.05 g. 10% Pd-C, 1 ml. 10% HCl, or 1 ml. 10% NaOH
     hydrogenated 3 hrs. at room temperature gave 0.24 g. mixture X and XI.
containing 43%
     X and 57% XI. The mixture A (1 g.) in 50 ml. MeOH containing 3 ml. 10% NaOMe
     refluxed 2 hrs. and the mixture isolated gave 0.95 g. of new equilibrium
     mixture, b0.2 60-1°. The same reaction was repeated and the reaction
     time increased to 20 hrs. The mixture A (0.5 g.) in pentane kept overnight
     on a column of basic Al203 gave the same equilibrium mixture The infrared
     spectra of mixts, showed that in each case 85-7% of the trans-epimer was
     formed. Mixture A (2 g.) in 80 ml. tetrahydrofuran stirred overnight with 5
    g. Li hydridotri-tert-butoxyaluminate at 50° and the usual work up
     gave 2 g. oily product, and this purified by chromatography on
    Al203 gave 1.7 g. product. The trans-perhydrobenzocyclohepten-cis(eq.)-1-ol(XII) (eq. = equatorial)m. 56°; p-nitrobenzoate m. 100-1°
    (MeOH); acetate b0.01 63°, n25D 1.4780. The trans-
    perhydrobenzocyclohepten-trans(ax.)-1-ol (XIII) (ax. = axial) b0.5
     77-8°, n25D 1.5000; p-nitrobenzoate m. 70°; acetate b0.05
```

59-60°, n20D 1.4792. When XII and XIII were eluated from the

```
column without separation, the proportions of XII and XIII were 53 and 47%,
     resp. Mixture A (1 g.) in 50 ml. Et2O added dropwise to 0.25 g. LiAlH4 in
     50 ml. Et20, stirred overnight at room temperature, and the product
     chromatographed on Al203 gave mixture of trans alcs. (0.12 g.) followed by
     0.6 g. pure cis-perhydrobenzocyclohepten-1-ol (XIV), m. 60°;
     p-nitrobenzoate m. 75°; acetate b0.02 68°. The above trans
     alc. (0.6 g.) in 1 ml. C5H5N kept overnight at room temperature with 0.6 g.
     CrO3-C5H5N, decomposed, and distilled gave an almost-quant. yield
     trans-perhydrobenzocyclohepten-1-one (XV), b0.01 55°, n20D 1.4948;
     2,4-dinitrophenylhydrazone m. 226°; semicarbazone m. 209-10°
     (aqueous alc.); oxime m. 141-2°(alc.). XV was also obtained when the
     other trans alc. was oxidized by the same method. XIV was oxidized with
     CrO3-C5H5N as described above to give cis-perhydrobenzocyclohepten-1-one
     (XVI), b0.1 53°, n20D 1.4959; semicarbazone m. 182-3°; oxime
     m. 88-9°. Epimerization of XVI with NaOMe in MeOH 5 hrs. gave a
     mixture contq 86% XV. The semicarbazones of XVI and XV behaved as
     homogeneous compds. and known mixts. were readily separated on basic
     alumina. I (1 q.) in 5 ml. Et20 was added to a mixture 0.1 q. Li and
     500 ml. liquid NH3, after a few min. 1.5 q. Li added, treated after 2 hrs.
     with solid NH4Cl, evaporated, the mixture extracted with Et2O, the Et2O washed,
     evaporated, and the 0.85 g. oil shown to be a mixture of I and XV and XVI.
     Separation was difficult. The mixture was therefore directly reduced with
LiAlH4
     1 hr. at room temperature, and the mixture of saturated alcs. directly
oxidized by
     CrO3 and the ketone mixture was analyzed by infrared method and shown to
     contain 21% XVI and 79% XV. I (1 g.) in 5 ml. dry Et20 stirred 2 hrs.
     with a cooled solution of 2 q. Li in 500 ml. liquid NH3, evaporated, and the
     mixture worked up as above gave 0.65 g. oily product which
     chromatographed on Al203 gave 0.08 g. ketonic mixture and 0.5 g. mixture of
     saturated alcs. The alc. mixture oxidized with CrO3 gave a mixture of XVI and
     containing 55% XVI as estimated by infrared measurement. Mixture A (0.25 g.)
in i
     ml. dry Et20 and 100 ml. liquid NH3 treated with 0.2 q. Li and stirred 2
     hrs. gave a mixture containing 50% cis ketone. The relative oxidation rates
     above ales, were measured and the values given in a table. The relative
     rates of saponification of acetates of these alcs, were also measured and
given in
     a table.
=> d his
     (FILE 'HOME' ENTERED AT 12:21:48 ON 13 AUG 2008)
     FILE 'CAPLUS' ENTERED AT 12:22:09 ON 13 AUG 2008
              0 S (BASE (3W) CATALYST) (L) (ABSORBENT (3W) SUPPORT)
              0 S (BASE (7W) ABSORBENT (3W) SUPPORT)
             12 S BASE (4W) ALUMINA (4W) SUPPORT
             9 S BASE (5W) SILICA (3W) SUPPORT
             0 S L3 AND L4 AND (FATTY (2W) ACID (2W) ALKYL (2W) ESTER)
```

χV

L3

L4

L5

L6

T.8

T.9

1 S L3 AND ESTER 1 S L4 AND ESTER

0 S IMMOBILIZING (L) (BASE (2W) CATALYST) (L) SILICA

0 S IMMOBILIZING (S) (BASE (2W) CATALYST) (S) SILICA

```
L10
            2 S IMMOBILIZING (S) BASE (S) SILICA
L11
           17 S IMMOBILIZED (S) ALKALI (S) SILICA
L12
            1 S L11 AND ESTER
L13
           712 S BASIC (2W) ALUMINA
L14
           68 S L13 AND ESTER
L15
             3 S L14 AND (FAT! OR OIL!)
=> s basic (2w) silica
       429273 BASIC
         3745 BASICS
        432603 BASIC
                (BASIC OR BASICS)
       582524 SILICA
         4397 STLTCAS
       583005 SILICA
                (SILICA OR SILICAS)
L16
          256 BASIC (2W) SILICA
=> s 116 and ester
       626731 ESTER
        460209 ESTERS
       869626 ESTER
                (ESTER OR ESTERS)
            6 L16 AND ESTER
=> s 117 and (fat! or oil!)
       185578 FAT!
       433078 OIL!
            0 L17 AND (FAT! OR OIL!)
L18
=> d 117 1-6 ibib abs
L17 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
                       2000:404004 CAPLUS
DOCUMENT NUMBER:
                        133:125398
TITLE:
                        Determination of intermediates in synthesis of
                        midecamycin acetate by TLC method
AUTHOR(S):
                        Liu, Xiaoping
CORPORATE SOURCE:
                       Xiangtan Institute of Technology, 411201, Peop. Rep.
                        China
SOURCE .
                        Hunan Huagong (1999), 29(1), 43-44
                        CODEN: HHUAFT: ISSN: 1005-8435
PUBLISHER:
                        Hunan Huagong Bianjibu
DOCUMENT TYPE:
                        Journal
LANGUAGE:
                        Chinese
    The qual, anal, of the intermediates in synthesis of midecamycin acetate
AB
    was described. Based on the system test of organic solvents, it was found
     that the ternary system of fatty alc.-fatty acid ester-aromatic
    hydrocarbon with the basic silica gel G plate was
    satisfactory in anal. effects.
L17 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
                        1984:573146 CAPLUS
DOCUMENT NUMBER:
                        101:173146
ORIGINAL REFERENCE NO.: 101:26193a,26196a
                        Water-dispersible coating compositions
PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan
```

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. JP 59071316 A 19840423 JP 1982-181920 JP 04048832 B 19920807 ---- ------ -----------------19821016

PRIORITY APPLN. INFO.:

JP 1982-181920 19821016 AB The title compns. are based on aqueous resin dispersions, which are prepared by emulsion-polymerization of 100 parts (meth)acrylate ester(s) in the presence of 0.1-10 parts unsatd. alkoxysilane and 1-200 parts colloidal silica. Thus, 2-ethylhexyl acrylate 40, Me methacrylate 59, acrylic acid 1, and γ-methacryloyloxypropyl trimethoxysilane (I) 0.5 parts were added in 3 h to a mixture containing Na lauryl sulfate 3, Stotex 30 (a basic colloidal silica) 15, water 150, (NH4)2S2O8 0.5, and NaHSO3 0.2 parts at 60°, and the reaction mixture was held 2 h at this temperature, adjusted to pH 8-9, with 14% aqueous NH3, and adjusted to 40% solids to give a polymer [92488-31-8] emulsion. This emulsion was mixed with TiO2, a thickener, a film-forming additive, a dispersant, and water to give a composition with good stability, which provided films with good resistance to water, alkali, and stains as compared with similar coatings

L17 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1980:110570 CAPLUS DOCUMENT NUMBER: 92:110570

ORIGINAL REFERENCE NO.: 92:18037a,18040a

TITLE: Anionic activation on solid inorganic supports:

containing no I and (or) silica, or too much I and (or) silica.

malonic ester syntheses

AUTHOR(S): Bram, Georges; Fillebeen-Khan, Tauqir CORPORATE SOURCE: Groupe Rech. 12, CNRS, Thiais, 94320, Fr. SOURCE: Journal of the Chemical Society, Chemical

Communications (1979), (12), 522-3

CODEN: JCCCAT; ISSN: 0022-4936 DOCUMENT TYPE:

Journal English LANGUAGE:

OTHER SOURCE(S): English
CASREACT 92:110570

AB (MeO2C)2C-H generated on basic inorg. solid supports (alumina and silica gels containing NaOMe) underwent either intra- or intermol. alkylations selectively. E.g., treatment of CH2(CO2Me)2 with alumina containing 1 equiv NaOMe/kg followed by Br(CH2)5Br (3 days) gave 43% Br(CH2)5CH(CO2Me)2 exclusively; only 1,1-bis(methoxycarbonyl)cyclohexane was formed when larger ratios of NaOMe: alumina were used.

L17 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1974:535750 CAPLUS DOCUMENT NUMBER: 81:135750

ORIGINAL REFERENCE NO.: 81:21365a,21368a

Alkyl esters of aromatic carboxylic acids

INVENTOR(S): INVENTOR(S): Norton, Richard V.
PATENT ASSIGNEE(S): Sun Ventures, Inc.
SOURCE: Ger. Offen., 11 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATI	ENT NO.	KIND	DATE	API	PLICATION NO.		DATE
						-	
DE :	2401332	A1	19740718	DE	1974-2401332		19740111
US :	3935238	A	19760127	US	1973-323477		19730115
CA :	1018992	A1	19771011	CA	1973-184695		19731031
IT:	1006769	В	19761020	ΙT	1974-19156		19740107
JP ·	49095935	A	19740911	JP	1974-5642		19740110
GB :	1415814	A	19751126	GB	1974-1576		19740114
RITY	APPLN. INFO.:			US	1973-323477	A	19730115

PRIO AB

Alkyl esters of aromatic carboxylic acids were prepared by the reaction of the ammonium salt of the acid with an alc. in the gas phase at 230-300°. The ammonium salts were obtained by the hydrolysis of the corresponding nitriles. Thus, a mixture of monoammonium and diammonium salts of p-C6H4(CO2H)2 reacted with MeOH in the presence of basic silica gel to give up to 71% p-C6H4(CO2Me)2.

L17 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1971:23235 CAPLUS DOCUMENT NUMBER: 74:23235

ORIGINAL REFERENCE NO.: 74:3769a,3772a

TITLE:

Polymerization of epoxy hydrocarbons in the presence

of basic silica gel or basic crystalline aluminosilicate as heterogeneous catalyst

INVENTOR(S): Orkin, Bernard A.

PATENT ASSIGNEE(S): SOURCE:

Mobil Oil Corp. U.S., 4 pp. CODEN: USXXAM

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3539648	A	19701110	US 1967-647948	19670622
RIORITY APPLN. INFO.:			US 1967-647948 A	19670622

AB Polyether polyols were obtained in improved yields by polymerizing an olefin oxide in the presence of a basic alkali metal or alkaline earth metal silica gel or crystalline aluminosilicate. The polyether polyol products were treated with isocyanates or carboxylic acids to produce polyurethanes or esters. Thus, a silica gel catalyst was prepared by adding 240 ml

triacetin to 3280 ml Na silicate solution containing 60% water, 5% NaOH, and 35%

silicate. The liquid gelled in .apprx.45 min and the gel was dried at 225-250°F. A mixture of 120 g propylene oxide and 10 g catalyst was polymerized at $400\,^{\circ}\text{F}$ during 6 hr. Excess propylene oxide was distilled to give 33 g viscous liquid with OH number 313 and mol. weight 347. The

polymerization of the olefin oxide could also be initiated in the presence of a polyhydroxy or polyamino compound, such as pentaerythritol, trimethylolpropane, ethylene glycol, propylene glycol, sucrose, or melamine. The polymerization could also

he

PR

carried out in Me2SO. Esterification of the products with carboxylic acids gave synthetic ester lubricants, while treatment with organic isocyanates, such as tolylene diisocyanate, produced polyurethanes useful as adhesives, structural foams, and coatings.

```
L17 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1957:5761 CAPLUS
DOCUMENT NUMBER:
                      51:5761
ORIGINAL REFERENCE NO.: 51:1277f-q
TITLE:
                      Products from oxidation of the lactone of
```

hydroxytetrahydroabietic acid

INVENTOR(S): Subluskey, Lee A.

PATENT ASSIGNEE(S): Hercules Powder Co. DOCUMENT TYPE: Patent LANGUAGE . Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
PATENT NO.
             KIND DATE
                          APPLICATION NO.
-----
             ----
                  -----
                           -----
                  19560612 US 1955-510829
US 2750371
Oxidation of the lactone of 4a-hydroxytetrahydroabietic acid (I), m.
```

131-2°, with several different oxidizing agents, such as CrO3, CO naphthenate, O or hydroperoxides, and separation on a column of either basic alumina or silica gel and diatomaceous earth gave the 7-oxo derivative of I, m. 150-2° and the 14-HO lactone, m. 180.5-1.5°. These materials are useful as plasticizing ingredients in nitrocellulose lacquers.

=> d his

```
(FILE 'HOME' ENTERED AT 12:21:48 ON 13 AUG 2008)
```

```
FILE 'CAPLUS' ENTERED AT 12:22:09 ON 13 AUG 2008
             0 S (BASE (3W) CATALYST) (L) (ABSORBENT (3W) SUPPORT)
L2
             0 S (BASE (7W) ABSORBENT (3W) SUPPORT)
L3
            12 S BASE (4W) ALUMINA (4W) SUPPORT
            9 S BASE (5W) SILICA (3W) SUPPORT
L4
L5
            0 S L3 AND L4 AND (FATTY (2W) ACID (2W) ALKYL (2W) ESTER)
L6
            1 S L3 AND ESTER
L7
            1 S L4 AND ESTER
1.8
            0 S IMMOBILIZING (L) (BASE (2W) CATALYST) (L) SILICA
            0 S IMMOBILIZING (S) (BASE (2W) CATALYST) (S) SILICA
L9
            2 S IMMOBILIZING (S) BASE (S) SILICA
T-10
L11
           17 S IMMOBILIZED (S) ALKALI (S) SILICA
L12
            1 S L11 AND ESTER
L13
          712 S BASIC (2W) ALUMINA
           68 S L13 AND ESTER
L14
L15
            3 $ L14 AND (FAT! OR OIL!)
L16
           256 S BASIC (2W) SILICA
L17
            6 S L16 AND ESTER
L18
            0 S L17 AND (FAT! OR OIL!)
```

=> s basic (4w) bauxite 429273 BASIC 3745 BASICS

```
432603 BASIC
                (BASIC OR BASICS)
        16715 BAUXITE
         3716 BAUXITES
        17088 BAUXITE
                (BAUXITE OR BAUXITES)
L19
           46 BASIC (4W) BAUXITE
=> s 119 and ester
       626731 ESTER
        460209 ESTERS
       869626 ESTER
               (ESTER OR ESTERS)
1.20
            0 L19 AND ESTER
=> d his
     (FILE 'HOME' ENTERED AT 12:21:48 ON 13 AUG 2008)
    FILE 'CAPLUS' ENTERED AT 12:22:09 ON 13 AUG 2008
             0 S (BASE (3W) CATALYST) (L) (ABSORBENT (3W) SUPPORT)
             0 S (BASE (7W) ABSORBENT (3W) SUPPORT)
L2
L3
            12 S BASE (4W) ALUMINA (4W) SUPPORT
             9 S BASE (5W) SILICA (3W) SUPPORT
1.4
T.5
             0 S L3 AND L4 AND (FATTY (2W) ACID (2W) ALKYL (2W) ESTER)
             1 S L3 AND ESTER
L6
L7
             1 S L4 AND ESTER
L8
             0 S IMMOBILIZING (L) (BASE (2W) CATALYST) (L) SILICA
L9
            0 S IMMOBILIZING (S) (BASE (2W) CATALYST) (S) SILICA
L10
             2 S IMMOBILIZING (S) BASE (S) SILICA
L11
           17 S IMMOBILIZED (S) ALKALI (S) SILICA
L12
             1 S L11 AND ESTER
L13
          712 S BASIC (2W) ALUMINA
L14
           68 S L13 AND ESTER
L15
            3 S L14 AND (FAT! OR OIL!)
L16
           256 S BASIC (2W) SILICA
L17
            6 S L16 AND ESTER
L18
            0 S L17 AND (FAT! OR OIL!)
           46 S BASIC (4W) BAUXITE
L19
L20
            0 S L19 AND ESTER
=> log off
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y) /N/HOLD:v
STN INTERNATIONAL LOGOFF AT 12:43:31 ON 13 AUG 2008
```